

**REMARKS**

The Official Action mailed September 1, 2004, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. A further *Request for Continued Examination* (RCE) is filed herewith to facilitate entry and consideration of the above amendments. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on January 13, 2000; April 27, 2000; June 9, 2000; January 3, 2001; January 31, 2001; July 5, 2001; August 15, 2001; October 15, 2001; January 9, 2002; June 7, 2002; July 9, 2002; July 24, 2003; and February 10, 2004.

Claims 13-17 and 46-82 were pending in the present application prior to the above amendment, of which claims 13, 46, 51, 55, 60, and 64 are independent. The Applicants note with appreciation the allowance of claims 46-50, 70, and 76. Remaining rejected independent claims 13, 51, 55, 60, and 64 have been amended herewith and new dependent claims 83-97 have been added to recite additional protection to which the Applicants are entitled. Accordingly, claims 13-17 and 46-97 are now pending in the present application, of which claims 13, 46, 51, 55, 60, and 64 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Applicant appreciates Examiner Loke's time in conducting a personal interview in the subject application on November 15, 2004. During the interview, Applicant discussed the proposed amendments to independent claims 13, 51, 55, 60, and 64, and new claims 83-97. Applicant noted that support for the pending claims can be found in Figure 2C, and that the claims as amended are further supported by Figure 2C, Figures 12A and 12B, and the specification as described more fully below. It was generally agreed, as noted in the *Interview Summary*, that these amendments seem to overcome the outstanding rejection under 35 U.S.C. § 112, first paragraph. It was also understood

that Applicant may file an RCE with this response, and that any further *Official Action* following an RCE would not be made final in view of the amendments and new claims presented herewith.

Paragraph 2 of the Official Action rejects claims 13-17, 51-69, 71-75, and 77-82 under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. More specifically, the Official Action asserts that the claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one of skill in the art that the inventor, at the time the application was filed, had possession of the claimed invention. In other words, the Official Action asserts that the specification lacks support for the claims.

The Official Action asserts that Figures 12A, 12B, and 13A to 16E, and the written specification at pages 28, lines 13-17, disclose a protective film 306 made of silicon oxide that is in direct contact with the side surfaces of the second conductive layer, but the specification never discloses that the interlayer insulating film is in direct contact with at least side surfaces of the second conductive layer as recited in claims 13, 51, 55, 60, and 64.

As noted during the interview, Figure 2C of the subject application clearly discloses an interlayer insulating film 130 formed in contact with a side surface of the second gate electrode (wiring) 109 as described in the paragraph bridging pages 16-17 of the specification. The specification broadly discloses this Embodiment Mode of the subject invention, which could be used in Example 1, described starting on page 22 and including Figure 12. Therefore, for this first reason, it is respectfully submitted that the subject application does, in fact, support the claims by clearly disclosing that the inventor, at the time the application was filed, was in possession of a semiconductor device having a interlayer insulating film in contact with a second conductive layer, or gate electrode as shown in Figure 2C.

Furthermore, independent claims 13, 51, 55, 60, and 64 have been amended herewith to delete the word "interlayer" before --insulating film-- in each instance.


Thus, as amended, these claims recite "an ~~interlayer~~ insulating film formed over the gate electrode and the gate insulating film; . . . wherein said ~~interlayer~~ insulating film is in direct contact with at least side surfaces and a top surface of the second conductive layer." By these amendments, these claims have been amended to delete "interlayer" and now more broadly recite any insulating film formed over the gate electrode and in contact with side surfaces and a top surface of the second conductive film. These claims are broadly worded to cover any insulating film that contacts the gate electrode in the claimed manner. Such insulating film could be, for example, a protective film as shown in Figure 12A as reference number 306 or an interlayer insulating film as shown in Figure 2C as reference number 130. It is respectfully submitted that claims 13, 51, 55, 60, and 64 are in conformance with 35 U.S.C. § 112 for this further reason and favorable reconsideration is requested.

Furthermore, the claims now recite that the insulating film is in contact with at least side surfaces and a top surface of the second conductive layer to more clearly distinguish these claims over the prior art of record. As amended, the claims are believed to remain novel and unobvious over the prior art of record and to be in proper condition for allowance.

New claims 83-97 have been added to recite additional protection for the subject invention. These new claims are directed to three additional features with new claims 83, 86, 89, 92, and 95 reciting that the insulating film comprises silicon oxide. This feature finds support in at least page 16, line 27; page 28, line 15; Figure 2C and Figure 12A and 12B. New claims 84, 87, 90, 93, and 96 recite that the insulating film is a protective film. These claims find support in at least page 28, line 15 and Figures 2C, 12A, and 12B. Finally, new claims 85, 88, 91, 94, and 97 recite that the insulating film comprises a laminate of a first film comprising silicon oxide and a second film comprising silicon nitride. These claims find support in at least page 28, lines 13-20 and Figures 12A and 12B (reference numbers 306 and 307).

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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